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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,329	01/25/2001	Eiji Ohara	862.C2096	3932

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EXAMINER

JONES, DAVID

ART UNIT PAPER NUMBER

2622

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/768,329	Applicant(s) OHARA, EIJI	
	Examiner David L Jones	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>032901, 041304</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 3/29/01 was filed after the filing date of the application on 1/25/01, but prior to the mailing of a first action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
3. The information disclosure statement (IDS) submitted on 4/13/04 was filed after the filing date of the application on 1/25/01, but prior to the mailing of a first action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
4. The information disclosure statement (IDS) submitted on 8/18/04 was filed after the filing date of the application on 1/25/01, but prior to the mailing of a first action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: IMAGE PROCESSING APPARATUS AND METHOD WITH FORGERY AND/OR FRAUD CONTROL.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (US 5,216,724).

Regarding claim 1, Suzuki et al. (Suzuki) discloses an image processing apparatus comprising:

an input unit inputting (fig. 2, 201, (column 3, lines 51-56) image data;

first discrimination means (mode 1, column 5, lines 36-43) for discriminating whether or not specific digital watermark information is embedded in the image data inputted by said input unit; as taught by Suzuki the system is checking for the existence of the red watermark in a YEN;

second discrimination means (mode 2, column 5, lines 36-43) for discriminating similarity between a feature obtained from the image data inputted by said input unit, and a feature of a specific image;

setting means (window comparator 408 in conjunction with the watermark detection circuit 410, fig. 4, column 5, lines 36-43) setting for setting the presence/absence of execution and an execution order of said first and second discrimination means; as taught by Suzuki that

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upon execution of the first mode the system checks for the existence of the red mark and depending on if it is found as to if the system continues to check further, column 5, lines 62-68, and column 6, lines 1-7, each of the comparators check for the existence of a watermark, if a watermark is found the comparator release a signal of "0" or "1" and depending on the signal must satisfy a condition $A > B$, the signal is feed to an AND gate 613 releases a output signal of "1" only when all comparators provide outputs of "1", otherwise releases a signal "0"; therefore the system is checking for existence of a watermark if it is found sets a "0" otherwise "1"; and

control means (CPU, fig. 4, 417, column 5, lines 36-43) for controlling operations of said first and second discrimination means in accordance with a setting state of said setting means and controlling a process of the image data on the basis of the discrimination results of first and second discrimination means.

Regarding claim 2, Suzuki discloses (fig. 10, column 10, lines 11-18) an image processing apparatus, wherein when said first discrimination means determines that the specific digital watermark information is embedded in the image data or when second discrimination means determines that the similarity between the features of the image data and specific image data is high, said control means prevents faithful reproduction of the image data. As shown in figure 10, that if a watermark (used as an example is a 10,000 YEN piece) is found in the material to be printed in the first scan, of which mode 1 is incorporated; then, during the second scan mode 2 is utilized to check for the exact position and angle of the watermark, then in the third scan the system does a final pattern matching, if the pattern matching is true then the system does one of two things either stops the printing altogether or prints black over the surface of the object therefore rendering the object useless, which is preventing faithful reproduction.

Regarding claim 3, Suzuki discloses (fig. 4, 412, column 5, lines 44-46) an image processing apparatus, further comprising storage means for storing the image data inputted by said input unit, and wherein said first and second discrimination means (column 6, lines 43-48) discriminate the image data stored in said storage means. The data of each line of scan is brought into the RAM, and then is compared by the window comparator.

Regarding claim 4, Suzuki discloses an image processing apparatus comprising: discrimination means (fig.4, 408, column 5, lines 36-61) for discriminating using a plurality of different discrimination processes whether or not image data is specific image; and control means (CPU 417) for controlling a process of the image data accordance with a discrimination result of said discrimination means,

wherein said discrimination means (mode 1, mode 2, mode 3, which is controlled by discrimination circuit 410) executes at least discrimination process discriminating whether or not specific digital watermark information embedded in the image data.

Regarding claim 5, Suzuki discloses (column 5, lines 36-61) an image processing apparatus, wherein said discrimination means executes at least a discrimination process for discriminating similarity between a feature obtained from the image data, and feature specific image which is set in advance (10,000 YEN).

Regarding claim 6, Suzuki discloses (column 12, lines 7-35) an image processing apparatus, wherein an arbitrary discrimination process of the plurality of different discrimination processes executed by said discrimination means can be selected. Suzuki teaches that the system can be altered so that the system can be setup for use in different countries, therefore, it would be inherently part to be able to select discrimination based upon the country of use.

Regarding claim 7, Suzuki discloses (column 15, lines 17-66 and column 20, lines 33-58) an image processing apparatus, wherein an order of the plurality different discrimination processes executed by said discrimination means can be set. As taught by Suzuki that the system allows for discriminating within the system a number of different methods of which two have been shown above in the columns and lines. Further, it would have been inherent that the systems can be setup in number of different ways and able to chosen by the user or manufacturer for the country being used.

Regarding claim 8, Suzuki discloses (column 13, lines 54-68, and column 14, lines 1-10) an image processing apparatus, wherein when it is determined in at least one of the plurality different discrimination processes that an input image is a specific image, said discrimination means aborts other discrimination processes.

Regarding claim 9, Suzuki discloses (column 5, lines 62-68, and column 6, lines 1-7) an image processing apparatus, wherein only when it is determined in a first discrimination process of the plurality of different discrimination processes that an input image specific image, said discrimination means executes second discrimination process. As taught by Suzuki that upon execution of the first mode the system checks for the existence of the red mark and depending on if it is found as to if the system continues to check further, column 5, lines 62-68, and column 6, lines 1-7, each of the comparators check for the existence of a watermark, if a watermark is found the comparator release a signal of "0" or "1" and depending on the signal must satisfy a condition $A > B$, the signal is feed to an AND gate 613 releases a output signal of "1" only when all comparators provide outputs of "1", otherwise releases a signal "0"; therefore the system is checking for existence of a watermark if it is found sets a "0" otherwise "1". It is understood that

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if the system determines in the first mode that it finds an object then it proceeds further, otherwise continues normally to print the incoming object.

Regarding claim 10, Suzuki discloses (column 15, lines 50-66) an image processing apparatus, wherein when image data inputted by input means is a specific image, said control means executes one of control inhibiting the image data from being stored in storage means, control for modifying the image data and storing the modified image data in the storage means, control erasing the image data temporarily stored in the storage means, and control for modifying the image data temporarily stored in the storage means and re-storing the modified image data in the storage means. Suzuki discloses that the system changes the magnification of the image in memory of two of the color signals and maintains the other color signals.

Regarding claim 11, Suzuki discloses an image processing method comprising:

- a input step of inputting image data (fig. 2, 201, (column 3, lines 51-56);
- a first discrimination (mode 1, column 5, lines 36-43) step of discriminating whether or not specific digital watermark information is embedded in the image data inputted at said input step;
- a second discrimination step (mode 2, column 5, lines 36-43) of discriminating similarity between a feature obtained from the image data inputted at said input step, and a feature of a specific image;
- a setting step (window comparator 408 in conjunction with the watermark detection circuit 410, fig. 4, column 5, lines 36-43) of setting the presence/absence of execution and an execution order of said first and second discrimination means; as taught by Suzuki that upon execution of the first mode the system checks for the existence of the red mark and depending on

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if it is found as to if the system continues to check further, column 5, lines 62-68, and column 6, lines 1-7, each of the comparators check for the existence of a watermark, if a watermark is found the comparator release a signal of "0" or "1" and depending on the signal must satisfy a condition $A > B$, the signal is feed to an AND gate 613 releases a output signal of "1" only when all comparators provide outputs of "1", otherwise releases a signal "0"; therefore the system is checking for existence of a watermark if it is found sets a "0" otherwise "1"; and

a control step (CPU, fig. 4, 417, column 5, lines 36-43) of controlling operations of said first and second discrimination step in accordance with a setting state of said setting step and controlling a process of the discrimination results of said first and second discrimination step.

Regarding claim 12, Suzuki discloses (fig. 10, column 10, lines 11-18) an image processing method, wherein when at said first discrimination step it is determined that the specific digital watermark information is embedded in the image data or when at said second discrimination step it is determined that the similarity between the features of the image data and specific image data is high, faithful reproduction of the image data is prevented at said control step. As shown in figure 10, that if a watermark (used as an example is a 10,000 YEN piece) is found in the material to be printed in the first scan, of which mode 1 is incorporated; then, during the second scan mode 2 is utilized to check for the exact position and angle of the watermark, then in the third scan the system does a final pattern matching, if the pattern matching is true then the system does one of two things either stops the printing altogether or prints black over the surface of the object therefore rendering the object useless, which is preventing faithful reproduction.

Regarding claim 13, Suzuki discloses (fig. 4, 412, column 5, lines 44-46) an image processing method, further comprising a storage step of storing the image data inputted at said input step, and wherein at said first and second discrimination step (column 6, lines 43-48) the image data stored at said storage step discriminated. The data of each line of scan is brought into the RAM, and then is compared by the window comparator.

Regarding claim 14, Suzuki discloses an image processing method comprising:
a discrimination step (fig.4, 408, column 5, lines 36-61) of discriminating using a plurality of different discrimination processes whether or not image data is a specific image;
a control step (CPU 417) of controlling a process of the image data in accordance with a discrimination result of the discrimination step,
wherein discrimination step (mode 1, mode 2, mode 3, which is controlled by discrimination circuit 410) includes the step of executing at least a discrimination process for discriminating whether or not a specific digital watermark information is embedded in the image data.

Regarding claim 15, Suzuki discloses a computer readable memory stores an image processing program within CPU 417,
said image processing program including:
program code of an input step inputting image data (fig. 2, 201, (column 3, lines 51-56);
a program code of a first discrimination step (mode 1, column 5, lines 36-43) of discriminating whether or not specific digital watermark information is embedded in the image data inputted at said input step;

a program code of a second discriminating (mode 2, column 5, lines 36-43) step of discriminating similarity between a feature obtained from the image data inputted at said input step, and a feature of a specific image;

a program code of setting step (window comparator 408 in conjunction with the watermark detection circuit 410, fig. 4, column 5, lines 36-43) of setting the presence/absence of execution and an execution order (column 5, lines 62-68, and column 6, lines 1-7) of said first and second discrimination step; and

a program code of a control step (CPU, fig. 4, 417, column 5, lines 36-43) of controlling operations of said first and second discrimination step in accordance with a setting state of said setting step and controlling a process of the image data on the basis of the discrimination results of said first and second discrimination step.

Regarding claim 16, Suzuki discloses (fig. 10, column 10, lines 11-18) a computer readable memory stores an image processing program within CPU 417, wherein when at said first discrimination step it is determined that the specific digital watermark information is embedded in the image data or when at said second discrimination it is determined that the similarity between the features of the image data and specific image data is high, faithful reproduction of the image data is prevented at said control step. As shown in figure 10, that if a watermark (used as an example is a 10,000 YEN piece) is found in the material to be printed in the first scan, of which mode 1 is incorporated; then, during the second scan mode 2 is utilized to check for the exact position and angle of the watermark, then in the third scan the system does a final pattern matching, if the pattern matching is true then the system does one of two things

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either stops the printing altogether or prints black over the surface of the object therefore rendering the object useless, which is preventing faithful reproduction.

Regarding claim 17, Suzuki discloses (fig. 4, 412, column 5, lines 44-46) a computer readable memory stores an image processing program within CPU 417, wherein said image processing program further including a program code of a storage step of storing the image inputted at said input step, and wherein at said first and second discrimination step (column 6, lines 43-48) the image data stored at said storage step discriminated. The data of each line of scan is brought into the RAM, and then is compared by the window comparator.

Regarding claim 18, Suzuki discloses a computer readable memory that stores an image processing program, which can process a specific image,

said image processing program including:

a program code of a discrimination step (fig.4, 408, column 5, lines 36-61) of discriminating using a plurality of different discrimination processes whether or not image data is a specific image; and

a program code of a control step (CPU 417) of controlling a process of the image data in accordance with a discrimination result of the discrimination step,

wherein the program code of the discrimination step (mode 1, mode 2, mode 3, which is controlled by discrimination circuit 410) includes at least a discrimination process program code for discriminating whether specific digital watermark information is embedded in the image data.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yang (US 6,731,784) discloses a detection and deterrence method of counterfeiting.

Hasuo et al. (US 5,765,089) discloses a discrimination device and method for controlling possible counterfeiting.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L Jones whose telephone number is (703) 305-4675. The examiner can normally be reached on Monday - Friday (7:00am - 3:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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